LAKE: PLEASANT P (VLMP 11)

TOWN: CARATUNK COUNTY: SOMERSET MIDAS: 224
TRUE BASIN: 1
SAMPLE STATION:

WHOLE LAKE INFORMATION

MAX. DEPTH: 60 m. (198 ft.)

MEAN DEPTH: 23 m. (77 ft.)

DELORME ATLAS #: 30

USGS QUAD: THE FORKS

IFW REGION D: Rangeley Lakes (Strong)

IFW FISH. MANAGMENT: Coldwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 422.0 ha. (1042.7 a.)

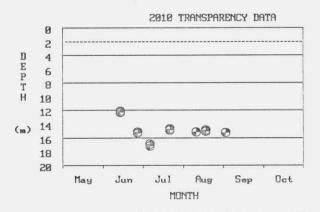
FLUSHING RATE: 0.10 flushes/yr.

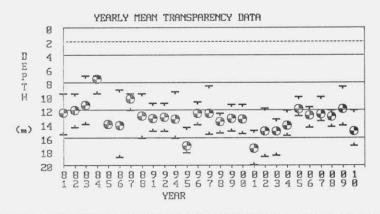
VOLUME: 96201876.0 cu. m. (78039 ac.-ft.)

DIRECT DRAINAGE AREA: 10.77 sq. km. (4.16 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. PLEASANT P has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN	MEAN	MEAN	MEAN															
	COLOR	pН	ALK	COND.	TOTAL	PHOS.	MEANS ((dqq	SECCH	I DISK	(m.)		CHLOROE	PHYLL	A(ppb)	TROP	HIC ST	ATE IN	DICES
	(SPU)		(mg/l)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS		
YEAR				<u>/cm</u>)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	N_	MIN. N	MEAN	MAX.	<u>C</u>	<u>G</u>	SEC	CHL
1981	64070	D	6.79 - 127	-	- 1	2011	-	-	9.5	12.3	15.5	6	±.,	70.00	= pr	-	-	10	-
1982	12	6.90	6.0	16	4		-	-	9.5	12.0	14.5	6	-	-	-	-	-	11	-
1983	5	6.90	7.0	29	-	-	-	-	7.0	11.2	14.0	5	-	-	-	-	-	13	-
1984	5.00	_		_	-	-	-	-	7.0	7.4	9.5	3	-	-		-	-	-	i - i
1985	10	7.10	8.0	27	1	-	3	-	14.0	14.0	14.0	1	,-	-	_	-	-	-	-
1986	-	-		-	-	-	-	-	9.0	14.2	18.8	4	-	-	-	-	-	-	_
1987	-	n n.⊃n	-	-		-	-	-	9.5	10.3	12.0	3	-	-	-	\pm	-	-	-
1988					-	1 -	-	-	9.5	12.8	16.0	2	-	-	-	-	-	-	-
1991	-119.5	-	-	-	-	-	-	-	11.0	13.2	15.0	3	- "	-	-	-	-	-	-
1992	3	6.77	7.0	22	2		_	-	11.0	13.0	15.0	4	0.7	0.7	0.7	-	-	; 	-
1994	12.74		-	_	_	A 1041111	_	-	9.3	13.3	16.0	4	-	-	-		-	-	
1995	-	-	-	-	-	= 2	-	-	14.5	17.1	18.2	4	-	-	-	-	-	-	_
1996	1-	-	-	-	-	-	-	-	10.7	12.4	14.1	5	-	-	-	-	-	10	-
1997		-	-	-	-	-	-	-	8.4	12.4	15.5	5	-	-	-		-	10	-
1998	-1-9	3-7-	-	-	-	-	-	-	12.4	13.6	15.3	5	-	-	-	-	-	7	-

LAKE: PLEASANT P (VLMP 11)
TOWN: CARATUNK

TOWN: CARATUNK COUNTY: SOMERSET MIDAS: 224
*TRUE BASIN: 1
*SAMPLE STATION: 1

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

	MEAN	MEAN	MEAN	MEAN															
	COLOR	pH	ALK	COND.	TOTAL	PHOS.	MEANS (ppb)	SECCH	I DISK	(m.)		CHLORO	PHYLL	A(ppb)	TROP	HIC ST	ATE IN	DICES
	(SPU)		(mg/l)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS		
YEAR				<u>/cm</u>)	CORE	GRAB	_GRAB_	GRAB	MIN.	MEAN	MAX.	N	MIN.	MEAN	MAX.	<u>C</u>	<u>G</u>	SEC	CHL
1999	5	-	8.5	30	5	-	-	-	11.1	13.2	15.0	5	8.9	8.9	8.9	-	-	8	-
2000	-	-	-	-	-	-	-	-	11.1	13.3	15.4	5	-	-	-	-	-	8	-
2001	-	-		-	-	-	-	-	14.9	17.5	19.9	3	-	-	-		-	-	-
2002	-	-	-	-	-	-	-	-	11.7	15.0	18.7	5	-	-	-		-	5	
2003	-	-	-	-	-	_	-	-	13.3	15.0	18.6	5	-	-	-	-	-	5	-
2004	5	7.30	10.8	30	5	-	-	-	12.0	14.2	15.7	6	0.5	0.5	0.5	-	-	6	-
2005	-	-	- 2	-	-	-	_	-	10.0	11.8	12.8	6	-	-	=	-	-	11	-
2006	-	-	-	-	-	-	-	-	11.5	12.7	14.5	5	-	-	-	-	-	9	-
2007	-	-	-	-	-	-	-	-	10.0	12.5	13.5	4	-	-	-	-	-	-	-
2008	5	6.96	7.6	26	-	2	-	-	12.0	12.9	14.4	5	-	-	-	-	-	9	-
2009	-	-	_	-	-	-	-	-	8.5	11.8	14.2	4	-	-	-	-	-	-	-
2010	-	-		-	-	-	-	-	12.0	15.0	17.1	4	-	-	-	-	-	-	-
SUMMARY:	6	6.96	7.8	26	3	2	3	-	7.0	13.1	19.9	27	0.5	3.4	8.9	-	-	9	-

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

					SAMPLE	DATE					
DEPTH	08/1	1/82	08/23	8/85	08/33	1/92	08/11	/99	08/1	5/04	
m	°C	ppm	°C	ppm	°c	ppm	°c	ppm	°C	ppm	
0.0	19.0	8.7	20.5	8.5	20.0	9.2	20.1	8.9	21.0	8.7	
1.0			, -	-	19.9	9.3	20.3	8.9	21.0	8.7	
2.0	19.0	8.7	20.5	8.5	19.8	9.3	20.3	8.9	21.0	8.8	
3.0	-	_	-	-	19.8	9.3	20.2	8.9	21.0	8.7	
4.0	19.0	8.7	20.5	8.5	19.7	9.4	20.2	8.9	21.0	8.8	
5.0	_	-	_		19.7	9.3	20.2	8.9	20.9	8.8	
6.0	19.0	8.7	20.5	8.5	19.5	9.3	20.2	8.9	20.9	8.8	
7.0	-	-	-	-	19.5	9.4	20.1	8.9	20.9	8.8	
8.0	19.0	8.7	20.3	8.5	19.3	9.4	20.1	8.9	20.9	8.8	
9.0	-	-	20.0	8.6	18.3	10.0	20.1	8.9	20.8	8.8	
10.0	14.0	11.6	16.0	10.5	18.0	10.2	17.7	11.9	20.8	8.8	
11.0	-	-	-	-	16.1	11.0	14.1	12.8	16.7	10.9	
12.0	11.0	14.4	11.0	11.6	12.8	12.6	11.9	13.0	14.8	11.7	
13.0) –	-	-	-	9.8	13.2	11.1	13.0	12.9	12.2	
14.0	8.0	12.5	9.0	11.8	8.4	13.2	10.5	12.9	11.3	12.5	
15.0	-	-	-	-	7.9	13.0	9.9	12.8	11.4	12.5	
16.0			8.0	11.7		=	9.3	12.7	-	-	
17.0	-	-	-	-	-	-	9.0	12.6	-	-	
18.0	7.0	14.0	7.2	11.6	6.8	12.1	8.5	12.5	-	-	
19.0	-	-		-	-	-	8.1	12.2	-	-	
20.0	_	-	7.0	11.2	_	-	8.0	12.0	7.7	12.2	
21.0		a E in			-	-	7.8	11.9	-	-	
22.0	6.0	13.8	_	v -	-	-	7.7	11.9		-	
23.0	-	-	50.5	-	-	-	7.7	11.8	-	-	
24.0	-	-	-	-	1-1	-	7.6	11.8	-	-	
25.0		-	6.5	10.9	: - · ·	-	7.4	11.6	6.9	12.0	
26.0		11.6	-	-	1-1	_	7.4	11.6	_	-	
27.0) –	-	-	-	-	-	7.3	11.4	-	-	

LAKE: PLEASANT P (VLMP 11)

COUNTY: SOMERSET

MIDAS: 224 *TRUE BASIN: 1

*SAMPLE STATION: 1

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	H			1	SAMPLE	DATE					
DEPTH	08/1	1/82	08/23	8/85	08/31	/92	08/1	1/99	08/16/04		
m	°C_	ppm	_°C_	ppm	_°C_	ppm	°C_	ppm	_°C_	ppm	
29.0	0.73	22-	7.4	a th	107 1	-	7.3	11.4		-	
30.0	5.0	11.0	6.1	10.5	-	-		-	6.6	11.7	
31.0	-	-	n =0.	-	-	-	7.1	11.2	-	_	
33.0	-	-		-		-	7.0	11.1	-	-	
35.0	-	-	6.0	10.4	7	-	7.0	11.0	6.4	11.6	
40.0	-	-	6.0	10.2	- -	-		-	6.3	11.6	
45.0	-	_	5.9	10-0	_	_	-	_	6.2	11.5	

WATER QUALITY SUMMARY

PLEASANT POND, CARATUNK

Midas: 224, Station: 01 - Primary

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for Pleasant Pond have been collected since 1981. During this period, 6 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Pleasant Pond is considered to be excellent, based on measures of SDT, total phosphorus (TP) and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Pleasant Pond is low.

Water Quality Measures: Pleasant Pond is a non-colored lake (average color 7 SPU) with an average SDT of 13.1m (43ft). The range of water column TP for Pleasant Pond is 1-5 parts per billion (ppb) with an average of 3 ppb, while Chla ranges from 0.5 - 8.9 with and average of 3.4 ppb. Recent dissolved oxygen (DO) profiles show no DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is very low. Oxygen levels below 5 parts per million stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species. So far Pleasant Pond has no signs of deep water habitat loss.

Water quality seems to be stable. Pleasant Pond has outstanding water quality.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: plea0224, Revised: 12/06, By: kah